

A 1
Cont 2

34. (New) A method in accordance with claim 29, wherein said compound is selected from the group consisting of methiothepin, octoclothepin and pharmaceutically acceptable salts thereof.

REMARKS

Claims 5, 7-21, and 29-34 are pending and presented for examination. Claims 1-4, 6 and 22-28 are canceled. Claims 29-34 are newly presented. Applicants have elected Group II and the disease species of CMV infection and the compound species of octoclothepin.

The new claims are drawn to the elected disease species and should therefore be in full compliance with the restriction requirement.

Amendments

New claim 29 recites a "method for treating CMV infection." For support, see p. 8, last paragraph of the specification. The remainder of claim 29 and the claims 30-34 are analogous to original claims 5, 7-13 and, *inter alia*, find support as follows:

| <u>New Claim</u> | <u>Analogous Claim</u> |
|------------------|------------------------|
| 29 | 5 |
| 30 | 9 |
| 31 | 10 |
| 32 | 11 |
| 33 | 12 |
| 34 | 13 |

In view of the above, Applicants believe the amendments add no new matter and respectfully request their entry.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Thomas J. Schall, Brian E. McMaster
Application No.: 09/944,163
Page 4

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,



Frank J. Mycroft
Reg. No. 46,946

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
FJM:mmm
WC 9050169 v1

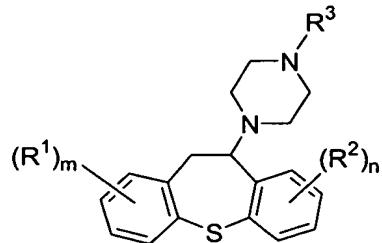
VERSION WITH MARKINGS TO SHOW CHANGES MADEIn the claims:

Claims 1-4, 6 and 22-28 have been cancelled.

New claims 29-34 have been entered as follows:

1 29. (New) A method for treating CMV infection in a human,
2 comprising administering an effective amount of a compound which blocks the binding of
3 a chemokine to US28 or a US28 fragment.

4 30. (New) A method in accordance with claim 29, wherein said
5 compound has the formula:



6 wherein

8 the subscripts m and n are independently integers of from 0 to 3;
9 R¹ and R² are substituents independently selected from the group consisting of
10 halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, (C₁-C₄)haloalkyl,
11 (C₁-C₄)haloalkoxy, nitro, cyano, (C₁-C₄)acyl, amino, (C₁-C₄)alkylamino,
12 and di(C₁-C₄)alkylamino; and

13 R³ is a substituent selected from the group consisting of (C₁-C₄)alkyl, (C₁-
14 C₄)haloalkyl and (C₁-C₄)acyl.

1 31. (New) A method in accordance with claim 29, wherein m is 0 and
2 n is 1.

1 32. (New) A method in accordance with claim 30, wherein m is 0, n is
2 1 and R² is selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy,
3 (C₁-C₄)alkylthio and (C₁-C₄)haloalkyl.

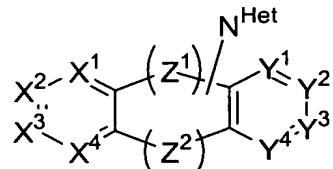
1 33. (New) A method in accordance with claim 32, wherein m is 0, n is
2 1 and R² is selected from the group consisting of halogen and (C₁-C₄)alkylthio.

1 34. (New) A method in accordance with claim 29, wherein said
2 compound is selected from the group consisting of methiothepin, octoclothepin and
3 pharmaceutically acceptable salts thereof.

APPENDIX I
PENDING CLAIMS AFTER ENTRY OF THE AMENDMENT

5. A method for preventing dissemination of CMV in a human, comprising administering an effective amount of a compound which blocks the binding of a chemokine to US28 or a US28 fragment.

7. A method in accordance with claim 5, wherein said compound has the formula:



wherein

X^1 , X^2 , X^3 and X^4 are each independently members selected from the group consisting of N and C-R¹, wherein R¹ is a member selected from the group consisting of H, halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkyl, (C₁-C₄)haloalkoxy, nitro, cyano, (C₁-C₄)acyl, amino, (C₁-C₄)alkylamino, and di(C₁-C₄)alkylamino;

Y^1 , Y^2 , Y^3 and Y^4 are each independently members selected from the group consisting of N and C-R², wherein R² is a member selected from the group consisting of H, halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkyl, (C₁-C₄)haloalkoxy, nitro, cyano, (C₁-C₄)acyl, amino, (C₁-C₄)alkylamino, and di(C₁-C₄)alkylamino;

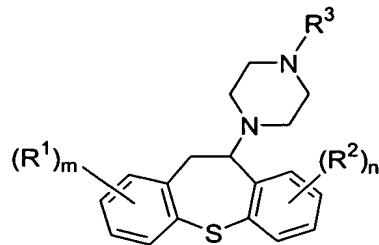
Z^1 is a divalent moiety selected from the group consisting of (C₁-C₃)alkylene;

Z^2 is a divalent moiety selected from the group consisting of -O-, -S- and -N(R³)- wherein R³ is a member selected from the group consisting of H, halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkyl, (C₁-C₄)haloalkoxy, nitro, cyano, (C₁-C₄)acyl, amino, (C₁-C₄)alkylamino, and di(C₁-C₄)alkylamino; and

N^{Het} is a substituted or unsubstituted 4-, 5-, 6-, or 7-membered nitrogen heterocycle.

8. A method in accordance with claim 7, wherein X^1 , X^3 , X^4 , Y^1 , Y^2 , Y^3 and Y^4 are all CH; Z^2 is -S-, and N^{Het} is a substituted 6-membered nitrogen heterocycle.

9. A method in accordance with claim 5, wherein said compound has the formula:



wherein

the subscripts m and n are independently integers of from 0 to 3;

R^1 and R^2 are substituents independently selected from the group consisting of halogen, (C_1 - C_4)alkyl, (C_1 - C_4)alkoxy, (C_1 - C_4)alkylthio, (C_1 - C_4)haloalkyl, (C_1 - C_4)haloalkoxy, nitro, cyano, (C_1 - C_4)acyl, amino, (C_1 - C_4)alkylamino, and di(C_1 - C_4)alkylamino; and

R^3 is a substituent selected from the group consisting of (C_1 - C_4)alkyl, (C_1 - C_4)haloalkyl and (C_1 - C_4)acyl.

10. A method in accordance with claim 9, wherein m is 0 and n is 1.

11. A method in accordance with claim 9, wherein m is 0, n is 1 and R^2 is selected from the group consisting of halogen, (C_1 - C_4)alkyl, (C_1 - C_4)alkoxy, (C_1 - C_4)alkylthio and (C_1 - C_4)haloalkyl.

12. A method in accordance with claim 9, wherein m is 0, n is 1 and R^2 is selected from the group consisting of halogen and (C_1 - C_4)alkylthio.

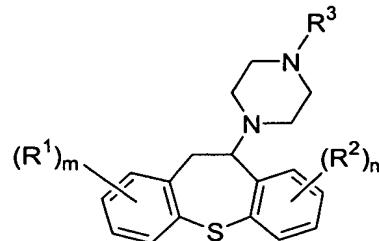
13. A method in accordance with claim 5, wherein said compound is selected from the group consisting of methiothepin, octoclothepin and pharmaceutically acceptable salts thereof.

14. A method for reducing cell motility in a CMV-infected cell, said method comprising contacting said CMV-infected cell with a motility-reducing amount of a compound that inhibits chemokine binding to US28 on the surface of said infected cell.

15. A method in accordance with claim 14, wherein said chemokine is a member selected from the group consisting of fractalkine, MIP-1 α , MIP-1 β , MCP-1 and RANTES.

16. A method in accordance with claim 14, wherein said chemokine is fractalkine.

17. A method in accordance with claim 14, wherein said compound has the formula:



wherein

the subscripts m and n are independently integers of from 0 to 3;

R^1 and R^2 are substituents independently selected from the group consisting of halogen, (C_1 - C_4)alkyl, (C_1 - C_4)alkoxy, (C_1 - C_4)alkylthio, (C_1 - C_4)haloalkyl, (C_1 - C_4)haloalkoxy, nitro, cyano, (C_1 - C_4)acyl, amino, (C_1 - C_4)alkylamino, and di(C_1 - C_4)alkylamino; and

R^3 is a substituent selected from the group consisting of (C_1 - C_4)alkyl, (C_1 - C_4)haloalkyl and (C_1 - C_4)acyl.

18. A method in accordance with claim 17, wherein m is 0 and n is 1.

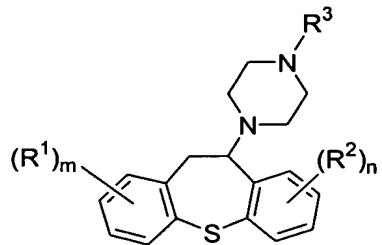
19. A method in accordance with claim 17, wherein m is 0, n is 1 and R^2 is selected from the group consisting of halogen, (C_1 - C_4)alkyl, (C_1 - C_4)alkoxy, (C_1 - C_4)alkylthio and (C_1 - C_4)haloalkyl.

20. A method in accordance with claim 17, wherein m is 0, n is 1 and R^2 is selected from the group consisting of halogen and (C_1 - C_4)alkylthio.

21. A method in accordance with claim 14, wherein said compound is selected from the group consisting of methiothepin, octoclotheon and pharmaceutically acceptable salts thereof.

29. (New) A method for treating CMV infection in a human, comprising administering an effective amount of a compound which blocks the binding of a chemokine to US28 or a US28 fragment.

30. (New) A method in accordance with claim 29, wherein said compound has the formula:



wherein

the subscripts m and n are independently integers of from 0 to 3;

R¹ and R² are substituents independently selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, (C₁-C₄)haloalkyl, (C₁-C₄)haloalkoxy, nitro, cyano, (C₁-C₄)acyl, amino, (C₁-C₄)alkylamino, and di(C₁-C₄)alkylamino; and

R³ is a substituent selected from the group consisting of (C₁-C₄)alkyl, (C₁-C₄)haloalkyl and (C₁-C₄)acyl.

31. (New) A method in accordance with claim 29, wherein m is 0 and n is 1.

32. (New) A method in accordance with claim 30, wherein m is 0, n is 1 and R² is selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio and (C₁-C₄)haloalkyl.

33. (New) A method in accordance with claim 32, wherein m is 0, n is 1 and R² is selected from the group consisting of halogen and (C₁-C₄)alkylthio.

34. (New) A method in accordance with claim 29, wherein said compound is selected from the group consisting of methiothepin, octoclotheon and pharmaceutically acceptable salts thereof.